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# WOMEN IN CORPORATE BOARDS AND FINANCIAL REPORTING CREDIBILITY: EVIDENCE FROM NIGERIA

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## ABSTRACT

The clamor for more women on corporate boards is on the increase. Academic research has reported several findings consistent with the view that boards perform better when there is gender diversity. This paper empirically examines the impact of women in corporate boards on financial reporting quality. Using a sample of 20 firms representing the various sectors of the Nigerian Stock Exchange, we conduct panel regressions of discretionary accruals on a set of explanatory variables constituting gender mix. Results provide robust evidence to suggest that the presence of a female director does not particularly improve the quality of financial reporting however financial reporting credibility improves as the proportion of women in the board increases. The study extends prior research by investigating how the gender mix of a board potentially impacts on financial reporting thereby providing interesting insights to financial accounting literature.

**KEYWORDS:** Gender Diversity, Boards, Earnings Management, Accounting, Nigeria

## INTRODUCTION

`The proportion of women who reach executive positions in the business world is still at the lowest level in most countries especially in Nigeria. It has been proved that the upward movement of women to top management positions in Nigeria is slower than that of men (Abiola, 2004). The pronounced cause is that women have always been considered as the weaker sex and as such have been alienated in the economic, political and socio-cultural arena. Studies such as that of Obi (2001) and Omotola (2007) have uncovered the hurdles women go through in arriving top positions in various organizations. These hurdles range from national cultural barriers to difficulty in balancing career and family.

The society seems to refuse to accept that women have any other role to play apart from the traditional role of supporting a man. However, recent debates and research works have been able to conceptually put forward a case of significant benefits which can be reaped from having corporate boards with sound gender mix. Carter et al (2003); Adams and Ferreira (2004); Singh et al (2001) and Fodio and Oba (2012) in their various studies demonstrated that women in corporate boards is a determinant for corporate philanthropic engagements. Companies with high female representation on their boards have been empirically proved to have stronger corporate governance than those with few or no women on the board of directors (Rosener, 2003) and also significantly impact on firm's environmental responsibility and disclosure (Fodio and Oba, 2012). These studies have thrown up arguments and proposals for the increase in the number of women in top corporate positions. In this light, several countries in a bid to increase the number of women in top executive positions and board roles have introduced various forms of actions ranging from legislations to quotas.

Gender quotas have recently arrived in the business world. The most widely acknowledged example of the gender

quota system is in Norway, where a 40% gender quota for public limited and state owned companies was introduced in December 2003 (Hoel, 2008). A similar legislated board quota has since been introduced in Spain (2007), France, Iceland and the Netherlands (2010); see Marinova et al (2010). France has set a 40% target to be attained in 2016, Spain (2015) while the Netherlands has not set a target date for compliance but simply requires non-compliance to be explained in company's annual report. Such quota systems are also being deliberated in Belgium, Canada and Italy where laws are pending at different stages of the ratification process (Sealy et al, 2008). In Nigeria no such laws exist or are being deliberated. The vision 2020 (National technical Working Committee on Corporate Governance) which was discarded before implementation only advocated for greater participation in corporate governance matters but was without specifics.

While there is support in academic literature with regards to enhanced gender diversity, the use of quota systems and their effect is quite questionable. According to Mychasuk (2010), the extent to which quotas are effective in helping women climb ht e corporate ladder is doubtful. It might increase the number of women on the board over time but does not necessarily guarantee the increase in number of those in senior management roles.

Having established the benefits of women in corporate governance, yielding increased financial performance and triggering enhanced engagement in philanthropic activities; in this article, we try to demonstrate whether women's representation in Nigerian boards of directors can affect the credibility and quality of financial reporting through the assessment of the earnings quality. Our research question stems: What is the impact of women in corporate boards on financial reporting credibility denoted by earnings quality?

## FINANCIAL REPORTING QUALITY AND GENDER MIX

The fundamental objective of financial reporting is to offer quality financial information concerning business/ economic entities which is relevant for economic decision making. This is important because quality reports influence stakeholders in making resource allocation decisions. However, financial reporting quality is a subjective evaluation of the extent to which the financial report is free of manipulation and accurately reflects the financial conditions and operating success of a business concern. It relates to the accuracy with which a company's reported financial statements reflect the operating performance and to their usefulness for forecasting future cash flows. A higher quality of financial reports facilitates better understanding of the past and better prediction of the future. According to Daske and Gebhardt (2006), assessing financial reporting quality unavoidably includes preferences among a myriad of constituents. Different user groups of financial reports have dissimilar preferences; consequently, perceived quality will deviate among constituents. As a result of this, measuring quality directly seems problematic (Botosan, 2004). Due to this position, quality of financial reporting has been measured by many by focusing on characteristics that influence quality of financial reports such as financial restatements, timeliness and earnings management (Schipper and Vincent, 2003; Cohen et al, 2004; Barth et al, 2008). Earnings management has been found to be the most employed proxy for financial reporting quality. It is a strategy used by the management of the company to deliberately manipulate the earnings of a company with a view to meet pre-established targets. It is a material and intentional misrepresentation of results with the intention to achieve predicted and stable financial results. It actually affects reported earnings quality thereby misleading stakeholders who engage in resource allocation decisions.

Cormier et al (2009) demonstrate that corporate disclosure and earnings quality are both subject to managers' discretion. Management of firms usually utilizes 'smoothing' techniques to achieve pre-specified profit targets. A vast body of literature indicates that earnings management is affected by the characteristics of firms' executives

(see Jiang et al, 2008; Matsunaga and Yeung, 2008; Roodposhti and Chasmi, 2011). These studies have examined the extent to which board dynamics have impacted on earnings management. They all document that sound governance mechanisms are likely to reduce the incidence of earnings management and eventually improve stakeholders' reliance on financial reporting quality. However, these studies have ignored the extent to which the gender mix of the firm's executives affects earnings quality.

This study has been largely motivated by finance literature that have bordered on how much women in the boardroom impact on governance and performance (see Erhardt et al, 2003; Rose, 2007; Adams and Ferreira, 2009). These studies have been able to document that the presence of women in boards affect the output of such boards both on managerial decision making and eventually financial performance. We intend to advance this direction by examining the extent to which the gender mix of a board impacts its financial reporting quality. Are female executives better equipped than their male counterparts to oversee corporate finance? Do women board directors produce more reliable financial statements than their male counterparts? With the debate and agitations for more female presence on boards of directors emerging as a salient issue; does this desired increased representation come as a mere symbol or does it come with substance on reliability on financial reports? Since women are more diligent in attending board meetings than their male counterparts and are more likely than men to join committees that monitor performance (Lincoln and Adedoyin, 2012); does this translate to better and qualitative financial reports?

Research in the U.K shows that having at least one female on the board of directors helps reduce the risk of bankruptcy and enhance accountability (Bernardi et al, 2002; Ripley, 2003). Peni and Vahamaa (2010) in their study of S&P 500 firms indicate that the gender of the firm's executives may affect the quality of reported earnings. They document that female CFOs may inherently be more prone to avoid opportunistic income-increasing earnings management and are associated with income-decreasing discretionary accruals. However, they do not find any relationship between earnings management and the gender of the firm's CEO. Using a large sample of Chinese listed firms' reported earnings during the period 2001-2006, Ye et al (2010) find no significant earnings quality difference of firms managed by female and male executives. They use four measures of earnings quality: earnings persistence, the accuracy of current earnings as indicators of future cash flows, the association between earnings and stock returns and the absolute magnitude of discretionary accruals. In the light of the above, we hypothesize in null for that:

- There is no significant positive relationship between the presence of women in boards and financial reporting quality.
- There is no significant positive relationship between the proportion of women in boards and financial reporting quality.
- Gender mix as measured by Blau's index has no significant impact on financial reporting quality.
- Firm size has no significant impact on financial reporting quality.

## METHODOLOGY

### Measurement of Variables

Presence of female directors (FPRES) – This variable is denoted by a dummy variable. Where the firm has a woman in the board of directors, it carries '1' and in the absence of this, it carries '0'.

Proportion of female directors (PROP) - This is the proportion of female directors in the board to the board size.

Blau's index of diversity (BLAU) – This is the degree of heterogeneity of the gender mix of a board. The index is

named after Blau, P.M (1997). It is a commonly used diversity index to measure evenness and heterogeneity. It is specified as follows:

$$1 - \sum P_i^2 \tag{1}$$

i = 1

Where $P_i$ = percentage of board members in each category

And n = number of categories

Gender is a dichotomous variable. As such, the range of the Blau index is 0 to 0.5 which means the closer to 0, the less diverse; and the closer to 0.5, the more diverse.

Firm Size (control variable) - Firms' earnings management decisions are likely to be influenced by the size of the firm. According to Watts and Zimmerman (1986), large firms are more politically visible and are more likely to manage earnings to reduce their political visibility (Hsu and Koh, 2005). This study has no specific prediction on the association between firm size and earnings management. However, we measure firm size as the natural logarithm of total assets as a proxy for firm size (FSIZ).

**Dependent Variable (FRQ)**

This study denotes financial reporting quality with the extent of earnings management. We use the cross sectional variation of the modified Jones model (Dechow et al, 1995) to measure discretionary accruals which is a proxy for earnings management. The proxy for financial reporting quality using measures of accruals quality derived in prior work (Dechow and Dichev, 2002) is based on the idea that accruals are estimates of future cash flows, and earnings will be more representative of future cash flows when there is lower estimation error embedded in the accruals process (McNichols, 2002). Dechow et al (1995) argue that the modified Jones model is the most powerful model for estimating discretionary accruals. The use of discretionary accruals used by the Dechow and Dichev (2002) model was augmented by the fundamental variables. The model is a regression of working capital accruals on lagged, current and future cash flows plus the change in revenue and plants, property and equipment (PPE). This makes accruals quality a better proxy for financial reporting quality using the Dechow and Dichev (2002) model. Discretionary accruals are obtained as follows:

$$DA = TACC - NDA \tag{2}$$

$$TACC = NDA + DA \tag{3}$$

Where TACC = total accruals

NDA = non discretionary accruals

DA = discretionary accruals

$$TACC_{it} = a\ (1/ASSETS_{it-1}) + a_1\ (\Delta\ REV_{it} - \Delta\ REC_{it}) + a_2\ PPE_{it} + e_{it} \tag{4}$$

Where $TACC_{it}$ = total accruals in year t for firm i

$\Delta\ REV_{it}$ = revenues in year t less revenues in year t-1 for firm i

$\Delta\ REC_{it}$ = receivables in year t less receivables in year t-1 for firm i

$PPE_{it}$ = gross property, plant and equipment in year t for firm i

$e_{it}$ = error term ( residuals) in year t for firm i

All variables are scaled by total assets year t-1

## DATA COLLECTION METHOD, POPULATION AND SAMPLE

Companies' financial statements have been utilized for data extraction related to each variable. These financial statements include balance sheets, income statements as well as boards' annual performance report to shareholders.

Population for the study is made up of firms quoted on the floor of the Nigerian Stock Exchange for the period 2006 – 2011. This period is considered suitable for this study due to the outcry for gender affirmative action in Nigeria during this time frame. Gender discrimination issues were at the highest in Nigeria during this period. A statistical random sampling method was employed to select two companies from each of the existing sectors ( excluding the financial and utility services) of the Nigeria Stock Exchange in order to arrive at a representative sample of twenty (20) sample firms. We exclude the financial and utility sectors because of the special regulatory environment in which they operate.

## RESEARCH TECHNIQUE AND MODEL SPECIFICATION

To test the research hypothesis of this study, the ordinary least squares (OLS) technique is used to measure, estimate and test the relationship between the gender variables and quality of financial reporting. In order to test for the existence of autocorrelation, the durbin-watson statistic is used. Each variable with its sign value less than 5% is acceptable. The $R^2$ and F tests were also used to examine the significance and predictive power of the model. These tests provide an empirical platform for making generalization for the study. The relationship between variables is predicted as follows:

$$FRQ = b_0 + b_1PRES + b_2PROP + b_3BLAU + b_4FSIZ + e \quad (5)$$

Where FRQ = Financial reporting quality

PRES = Female presence on board

PROP = Proportion of women on board to board size

BLAU = Blau diversity index

FSIZ = Firm size

## RESULTS AND CONCLUSIONS

**Table 1: Regression Results**

| Variable | Coefficient | T-Statistic | P rob |
|---|---|---|---|
| (Constant) | -2.33 | -4.108 | 0.003 |
| PRES | 4.78 | 2.196 | 0.062 |
| PROP | -1.13 | -2.074 | 0.011 |
| BLAU | -1.26 | -4.813 | 0.000 |
| FSIZ | 6.45 | 5.991 | 0.000 |
| F Statistics | 28.123 | Durbin-Watson Stat | 1.94 |
| $R^2$ | 0.134 | P rob (F-Statistic) | 0.001 |

Significant at 95% level of confidence.

The core variables of interest in our results are the women directors' variables. From the results it has been confirmed that the presence of a female director in the board has no influence in the quality of financial reporting as denoted by earnings quality. The fact that a woman is present in the board does not imply that the quality of reported earnings is improved on.

The probability is above 5% and as such, we accept the null hypothesis that there is no significant positive relationship between the presence of women in boards and financial reporting quality.

However, it seems that the quality of financial reporting improves as the proportion of women in the board increases. This is revealed in the t-statistics and probability results of the impact of proportion on the dependent variable. There is a negative significant impact of proportion on the dependent variable. There is a negative significant impact of proportion of female directors on financial reporting quality (earnings management). This demonstrates that women are better equipped than men to oversee quality financial reports and as the number of women in a board increases, the quality and reliability of the financial statement increases. The blau index of diversity corroborates this hypothesis. The gender mix variable has a negative significant impact on the financial reporting quality. The better the mix, the better the quality of financial reporting. In other words, firms with an optimal gender mix would have a lesser chance of earnings management. This gives support to the findings of Krishnan and Parsons (2008) who in their study of US firms between 1996-2000, find that high gender diversity firms disclose more conservative earnings than low diversity firms.

The size of the firm is also considered as a key factor in the gender-earnings management relationship. There is that likelihood that bigger firms would have bigger boards. Scholars have argued that the larger the board, the more the number of women in board positions (Sealy et al, 2007). The firm size in this study has also been documented as a significant variable in predicting financial reporting quality. This could stem from the fact that larger firms tend to monitor corporate performance better, are usually gender friendly and also do appoint well established auditing firms. These factors have the potentiality to restrict the likelihood for earnings management.

From all of the above interpretation and discussion it is abundantly clear that the quality of financial reporting is influenced by the gender-diversity of the board. This could largely be attributed to the socio-psychological characteristics possessed by female executives who obviously reflect in their aversion to risks, fraud and earnings manipulation.

Our study has been able to extend existing financial accounting literature by providing insights into the nexus between executive gender and earnings management. The study was motivated by the documented literature on the capability of women to positively influence the strategic direction of a firm and eventually contribute to its growth. Future works could maximize how such intrinsic behavioral traits in women influence financial reporting quality and at what point the number of women in board to board size ratio stems earnings manipulation.

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